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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/623,539 | 07/22/2003 | Rie Ishii | 116567 | 4892 |
| 25944 | 7590 | 09/02/2005 | EXAMINER | |
| OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320 | | | KUGEL, TIMOTHY J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1712 | |
| DATE MAILED: 09/02/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/623,539

Applicant(s)

ISHII ET AL.

Examiner

Timothy J. Kugel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2005 and 16 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-22 is/are pending in the application.
- 4a) Of the above claim(s) 16, 18, 20 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5-15, 17, 19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 and 5-22 are pending as amended on 16 August 2005.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

3. Applicant's election with traverse of Group 1, claims 1-15 and 17 to a polymer gel composition filed on 5 August 2005 is acknowledged. The traversal is on the ground(s) that a search for the subject matter of the elected claims would encompass the subject matter of the remaining claims. This is not found persuasive because a search of the non-elected claims would require additional burdensome searching for optical devices and films at least in class 359 subclass 196.

The requirement is still deemed proper and is therefore made **FINAL**.

Newly submitted claims 20 and 22 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the invention of the elected claims and newly submitted claims 20 and 22 are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as an optical composition without the additional substrate layer(s) and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Because these inventions are distinct for the reasons

given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 20 and 22 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

4. Applicant's argument, filed 5 August 2005, with respect to the location of the description of reference character 12 has been fully considered and is persuasive. The objection to the drawings has been withdrawn.

Specification

5. Applicant's amendment, filed 5 August 2005, with respect to the correction of minor informalities has been fully considered and are corrective. The objection to the specification has been withdrawn.

Claim Rejections - 35 USC § 102

6. The rejection of claims 1 and 5-15 under 35 USC 102(b) as being anticipated by Akashi is maintained. Applicant's arguments filed 5 August 2005 have been fully considered but they are not persuasive.

Applicant argues that Akashi does not teach the amended limitation of claim 1 wherein the monomer component (A) is an alky(meth)acrylamide; however, Akashi does indeed teach poly[N-alkyl-substituted (meth)acrylamides] (Column 6 Line 50-67).

7. Applicant's amendment, filed 5 August 2005, with respect to the amended limitation of claims 1 and 17 wherein the monomer component (A) is an alky(meth)acrylamide have been fully considered and overcomes the prior art. The rejection of claims 1, 5, 11, 12 and 17 under 35 USC 102(b) as being anticipated by Ogawa has been withdrawn.

8. Applicant's amendment, filed 5 August 2005, with respect to the amended limitation of claim 1 wherein the monomer component (A) is an alky(meth)acrylamide have been fully considered and overcomes the prior art. The rejection of claims 1, 7, 8, 14 and 15 under 35 USC 102(b) as being anticipated by Kawahara has been withdrawn.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Amended claims 1, 5-15, 17 and new claims 19 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Akashi in view of Ogawa.

Akashi et al. teach a polymer gel capable of swelling-contracting by absorbing-desorbing a liquid when a stimulus—such as the application of heat—is given (Column 3 Line 64 – Column 4 Line 14 and Column 4 Lines 56-66) comprising a crosslinked and/or interpenetrating network of polymers of (a) an alkyl(meth)acrylamide—from which one of ordinary skill in the art would immediately envisage ethyl(meth)acrylamide—and (b) a monomer other than (a) comprising a mono- or di-

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substituted (meth)acrylamide or a vinyl-type monomer (Column 5 Line 52 – Column 7 Line 28), a swelling liquid which can include alcohols, propylene carbonate, and or an acid (Column 10 Lines 52-67 and Column 15 Lines 13-20) and a light-modulating material (Column 8 Lines 7-22).

Akashi does not disclose expressly dispersing the polymer gel in a resin.

Ogawa et al. teach a polyacrylamide gel comprising acrylamide, N-methylacrylamide, and N,N-dimethylacrylamide—as exemplified by applicant—independently and in combination (Abstract, Column 1 Lines 7-11 and Column 2 Lines 63-68), crosslinked with N,N'-methylenebisacrylamide as exemplified by applicant (Column 3 Lines 4-25), in an aqueous medium wherein the water-soluble polymer is dispersed within the three dimensional crosslinked polymer structure (Column 4 Lines 48-60).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to disperse the polymer gel of Akashi in the resin of Ogawa. The motivation to do so would have been to provide a gel membrane that was not easily broken, easily handled, and readily processed for forming sample slots in optional shapes (Ogawa Column 2 Lines 28-32).

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Kugel whose telephone number is (571) 272-1460. The examiner can normally be reached Monday-Thursday.

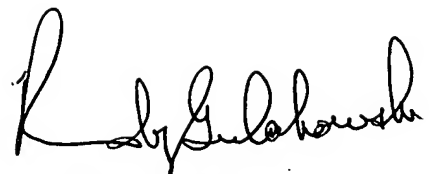
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "Randy Gulakowski". The signature is fluid and cursive, with a large initial "R" and a trailing flourish.

RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700